

**REMARKS**

Claims 1-14 are pending in this application. Claims 1-7 and 14 are rejected. Claims 8-13 are objected to. The Applicants have amended the specification to add the serial number of the related co-pending commonly owned patent applications. The Applicants have also amended claims 1, 8 and 9.

**35 U.S.C. 102(b)**

Claim 1 stands rejected under 35 U.S.C. 102(b) as being anticipated by *Um* (U.S. 5,689,380). The Examiner asserts that *Um* discloses a controlled membrane structure comprising a membrane, a supporting base, an electroactive bending actuator, and connector means.

The Applicants have amended claim 1 to add the limitation of nonrigidity to the connection means. The Applicants assert that this limitation is neither taught by nor suggested by *Um*.

**35 U.S.C. 103(a)**

Claims 2-4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Um* in view of *Kurz et al.* The Examiner asserts that *Um* discloses a controlled membrane structure comprising a membrane, a supporting base, an electroactive bending actuator, connection means and the use of bimorphs. The Examiner further asserts that the use of a bimorph electrostrictive polymer actuator for the purpose of providing a more reliable actuator is disclosed by *Kurz* and that it would have been obvious to one of ordinary skill in the art to modify *Um* with the actuator for the purpose of providing a more reliable controlled membrane structure.

Claims 5-7 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Um*. The Examiner asserts that *Um* discloses a controlled membrane structure comprising a membrane, a supporting base, an electroactive bending actuator, and connection means. The Examiner further asserts that one of ordinary skill in the art would have known the use of chemical adhesives for the purpose of attaching to opposed surfaces. Further, the Examiner asserts that it would have been well known in the art to use multiple pixels for the purpose of providing high resolution and that the court has held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

As amended claim 1 is neither taught by nor suggested by *Um*, nor by *Um* in view of *Kurz*, the Applicants assert that amended claim 1 is allowable, as are claims 2-4, 5-7 and 14 that depend therefrom.

Attached hereto is a marked-up version of the changes made to the claims. The attached page is captured "Version with Markings to Show Changes Made."

### CONCLUSION

In view of the amendments to claims 1, 8 and 9 and the above remarks, the Applicants submit that all pending claims in the instant application are in a condition for allowance. The Applicants respectfully request an early action to this end.

Respectfully submitted,

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Robin W. Edwards  
Robin W. Edwards  
Reg. No.: 39,179  
NASA Langley Research Center  
Mail Stop 212, 3 Langley Boulevard  
Hampton, VA 23681-2199  
757-864-3230 (voice)  
757-864-9190 (facsimile)  
Customer No.: 23351